

Atchison County

Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors

6/25/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 24 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Atchison County economy.¹

These 24 sectors have a total direct output of approximately **\$590.8 million** and support **1,275 jobs** in Atchison County. Running the model for all 24 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Atchison County Economy					
Contribution Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵
Direct Effect	1274.6	15.25%	\$148,561,300	25.29%	\$590,818,537
Indirect Effect	335.3	4.01%	\$36,623,464	6.23%	\$63,921,485
Induced Effect	429.9	5.15%	\$26,403,915	4.49%	\$49,182,015
Total Effect	2039.8	24.41%	\$211,588,679	36.02%	\$703,922,037

As shown in the above table, agriculture, food, and food processing sectors support **2,040 jobs**, or **24.41%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 24 agriculture, food, and food processing sectors is approximately **\$211.6 million**, or **36.02% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **413 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Atchison County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	412.7	\$31,055,756
Flour milling	199.3	\$283,498,813
Other snack food manufacturing	152.5	\$88,915,916
Wholesale trade	91.1	\$17,701,284
Grain farming	90.5	\$21,132,318
Leather and hide tanning and finishing	66.8	\$21,315,490
Landscape and horticultural services	58.1	\$2,607,819
Support activities for agriculture and forestry	57.2	\$2,666,686
Bottled and canned soft drinks & water	53.4	\$37,656,384
Oilseed farming	45.7	\$30,409,599

The flour milling sector directly contributes approximately **\$283.5 million** to the Atchison County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Flour milling	199.3	\$283,498,813
Other snack food manufacturing	152.5	\$88,915,916
Other animal food manufacturing	40.0	\$60,249,417
Bottled and canned soft drinks & water	53.4	\$37,656,384
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	412.7	\$31,055,756
Oilseed farming	45.7	\$30,409,599
Leather and hide tanning and finishing	66.8	\$21,315,490
Grain farming	90.5	\$21,132,318
Wholesale trade	91.1	\$17,701,284
Rail transportation	32.7	\$15,318,346

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Atchison County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	45.7	\$30,409,599.22
Grain farming	90.5	\$21,132,318.45
Vegetable and melon farming	1.7	\$208,192.27
Fruit farming	0.9	\$47,583.23
Tree nut farming	0.0	\$19.47
Greenhouse, nursery, and floriculture production	7.8	\$675,122.26
All other crop farming	19.0	\$945,143.94
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	412.7	\$31,055,756.32
Dairy cattle and milk production	4.8	\$1,176,104.10
Poultry and egg production	3.5	\$1,756,636.54
Animal production, except cattle and poultry and eggs	11.2	\$861,253.46
Support activities for agriculture and forestry	57.2	\$2,666,685.56
Other animal food manufacturing	40.0	\$60,249,417.34
Flour milling	199.3	\$283,498,813.26
Bread and bakery product, except frozen, manufacturing	6.6	\$800,093.21
Frozen cakes and other pastries manufacturing	0.4	\$63,629.06
Other snack food manufacturing	152.5	\$88,915,916.41
Bottled and canned soft drinks & water	53.4	\$37,656,383.64
Leather and hide tanning and finishing	66.8	\$21,315,490.01
Other leather and allied product manufacturing	6.7	\$822,035.46
Sawmills	0.5	\$150,436.82
Farm machinery and equipment manufacturing	1.3	\$410,824.09
Veterinary services	33.8	\$3,393,263.09
Landscape and horticultural services	58.1	\$2,607,819.33

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Atchison County, the retail sector was omitted.